THE CHIRONIAN

The Chironian is owned by the Alumni Association of the New York Homeopathic Medical College and Flower Hospital and published by the EXAMINER PUBLISHING HOUSE at 9 North Queen Street, Lancaster, Pa. It is issued monthly as the official journal of the alumni and students and is devoted to the interest of their Alma Mater. Original articles, alumni and undergraduate notes, book reviews and all reading matter of value to The Chironian should be sent to the Editor, E. R. Eaton, Flower Hospital, New York City.

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All subscriptions, advertisements, and other matters of business should be addressed to **Office of Publication at Lancaster, Pa.**, or mailed to Business Manager, H. R. Barrows, Flower Hospital, New York. All orders for reprints must be in within ten days after publication.

Subscription Price, $1.00 per Year. Single Copy, 10 Cents.

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THE CHIRONIAN

"In Essentials, Unity; In Non-Essentials, Liberty; In All Things, Charity."

VOLUME XXXIII DECEMBER 1916 NUMBER 6

Memorial.

BUKK G. CARLETON,

CLASS OF 1876.

THE unveiling of the tablet erected by the Department of Public Charities, to the memory of the late Bukk G. Carleton, M. D., took place on the afternoon of November 10th, 1916, in the rotunda of the Metropolitan Hospital. The tablet is placed on the wall of the main hall of the hospital, beside that of the late Egbert Guernsey, M. D., and resembles it in design.

E. Guernsey Rankin, M. D., presided, and spoke as follows:

DR. RANKIN: When one whom we have honored, respected and loved has left us, removed by the hand of death, we realize that all that is left to us from an earthly standpoint is the memory of the past, and the consolation attainable by paying tribute to the memory of the one who has gone. We are here today with the one purpose of honoring the memory of our friend and colleague, and a friend of this great institution.

It would almost seem that the memory of Dr. Carleton in this hospital scarcely calls for a memorial, most fitting and proper though it be, for he left behind here an active, living memorial, as it were, in that division of the hospital which his efficiency and skill established.

It would be a privilege for me to speak of Dr. Carleton as a

man, a friend, and a colleague, but there are others who will follow and who will do so better than I.

But let me say this and pardon me, for it is personal. This day brings to my mind most vividly those long weeks of suffering, some six years ago, when he stood by my bedside and cheered me and gave me courage, as he knew well how to do. And more than that, by his skill guided me along a dark and torturous path beset with many perils until, under the providence of God, he led me to the threshold of health.

We have with us this afternoon a representative of the City. It is the City which has erected this memorial. It is the City which has thus honored our friend and colleague. I have the honor to introduce the Hon. Henry C. Wright, First Deputy Commissioner of Charities.

Hon. Henry C. Wright: Some time ago it was suggested that it would be fitting if the Department of Public Charities of the City of New York could erect here a memorial tablet for Dr. Bukk G. Carleton, in memory of the long and faithful service which he rendered here, and that suggestion seemed to the Department a very fitting one and one which should be made, and, accordingly, it was arranged for. It has been erected and is here—I wish to present this first. (Walks over and lowers flag from tablet.) This is in plain sight of all, so it will be unnecessary for me to read it to you. This is your dedication of this tablet and by Dr. Carleton's honest services it was dedicated. It is hardly fitting that I should say much with regard to Dr. Carleton, because you will know that I am not familiar with his work and life, except as given to me, but the very fragmentary information that I have I think could be repeated. That he was graduated in, I think, 1876, and at that time took service at the Homeopathic Hospital at Ward's Island and remained his Interneship through, and became Attending Physician a few years later, and remained an Attending Physician for some years—I do not remember just how long. He became a Visiting Physician in the same Institution, specializing in the Genito-Urinary work. Then when that institution was transferred to this place, by the transferring of insane patients from this institution to Ward's Island, an interchanging of classes of patients, he came here and in connection with the institution here founded that service.

One thing that has been emphasized in my mind that I have heard about Dr. Carleton is a combination of somewhat unusual qualities and characteristics. That is, being not only a man well versed in his particular specialty, but a man that could get along with everybody and who made everybody feel like working who was associated with him, and filling everyone with the enthusiasm he had in his work. I want to emphasize that work because, as laymen, we stand off and look at other people who are doctors, and sometimes we can see faults in other people that they cannot see themselves. I presume that when the doctors call in to see us at the Central Office they see a great many faults in us that we do not see in ourselves.

But the doctor's life is an intense life. It is a life devoted almost night as well as day. It is a nerve-racking life and almost everybody who works up to the nerve limit all the time loses a little of his patience, a little of his balance and a little perspective, and it is awfully hard to deal as calmly and as equitably with other people with whom we come in contact daily, or associate with, when we are working at a stretch; and yet, after all—and this is the point I want to emphasize—where we, as men, deal with men in the every day course of life, we have to conduct ourselves in leash and control so that we do get along with other people, that we do make them feel our prsence, as a presence to be desired rather than a presence to be shunned; and the man who becomes a big specialist and still works in the field will not thoroughly and completely succeed unless he can combine with it these other qualities of getting along with people and inspiring people to believe in him and his best efforts and to believe in them and their best efforts.

So far as I have been able to learn, that was one of the characteristics which Dr. Carleton added to his technical knowledge. Now, just one moment, if I can take more time—I think I have taken all the time I should. As a reminder, I would like to express an idea. I know nothing about medicine at all, not even enough to make a bluff at it—as some people do. It is the thing with which I am most impressed and deeply interested in, and it is one of the most important callings that a man can enter. Not only because it deals with knowledge that is hard to get and hard to exercise and apply as dealing with human life, but

it is a calling filled with mysteries. I doubt whether there is any field of human knowledge or human endeavor that has a greater combination of real knowledge and real ignorance—you will pardon me for saying that—as the Medical Profession. I will need to say more less you misinterpret those words. How absolutely little today do we know about the chemistry of the human body. We know considerable about th reaction of certain drugs, and, if we give them in certain proportions, that certain results will surely follow; but just what has happened in there, just why it results, we do not know; and just what we could give or what results we could bring about if we only knew the chemistry on the inside. We do not know, and I have faith to believe that, in the days to come, the students who apply themselves industriously and efficiently and with faith will some day discover very much more of what the chemistry of the human body is, and how these reactions really take place. When we discover that, we may be in a position then to apply the drugs with a greater degree of scientific accuracy because we know to what extent they will effect the chemical reaction in the system. I don't want that to be interpreted that there is nothing but chemistry in the human system, with the very fact that there is life there.

I am very glad of this opportunity to speak these few words. I am very glad that this hospital had the service of one who knew how to combine with the healing qualities that which made people have faith in him.

Doctor Rankin then introduced Doctor Arthur L. Root, President of the Medical Board of this hospital.

Dr. Root: Representing the members of the Medical Board of this hospital, I desire to thank you, Commissioner, most heartily for the grateful and generous manner in which the great City Department, for which you speak, has honored the memory of our beloved Dr. Carleton. Dr. Carleton has given long, faithful and superior service to this institution.

He served as an Interne at the Ward's Island Homeopathic Hospital, October 1, 1876. He was appointed a member of the Medical Board, November 2, 1882, and continued his activities in that capacity four years, until October 7, 1886. At that time he found his work in private medical practice so arduous that he felt obliged to relinquish his hospital activities. However, in

1890, Dr. Carleton was re-elected to the Medical Board and served until his death.

It was during this last period of 25 years' service that his work was of the greatest value to this hospital, to its patients and Medical Board, and especially to the Genito-Urinary Department, which was maintained at the highest efficiency during the remainder of his life. This department is now ably conducted by his son, Dr. Sprague Carleton, whom his father eminently fitted to be his successor. I feel sure that every member of the Medical Board here today can speak of Dr. Carleton as a true and congenial friend, whose manners were characteristic of all splendid senses for justice and consideration. They remember also that he dignified his position as a member of our Medical Board, and that his advice was sought in all matters that came up for discussion.

It is hard, Mr. Commissioner, to say good-by to such a friend; it is hard for this hospital to be without his work. His death is a great loss to us and to the hospital. The world is better because such a man has lived in it. We are thankful for the praise of Dr. Carleton's life and work and most grateful to your, Sir, for this expression of your appreciation of our friend and fellow worker.

DR. RANKIN: This tribute to the memory of our friend will close with benediction by the Rev. Mr. Young.

He is also a maintainer of health, if he knows the causes that may disturb health and excite disease and how to remove them from healthy persons.—*Organon of the Rational Art of Healing.*

There must be a curative principle present in medicine; reason divines as much. But its inner nature is in no way to be perceived by us; its mode of expression and its outward effects alone can be judged by experience.—*Organon of the Rational Art of Healing.*

A disease in its whole range is represented only by the complex of morbid symptoms.—*Organon of the Rational Art of Healing.*

The Orthopedic Treatment of Infantile Paralysis.*

BY

ANSON H. BINGHAM, CLASS OF 1900.

Professor Orthopedic Surgery, New York Homeopathic Medical College and Flower Hospital.

FROM a strictly orthopedic standpoint the treatment of infantile paralysis may be divided into three stages:

1. The acute stage from the onset of the disease, until the disappearance of the tenderness. At this time our efforts are confined entirely to the prevention of deformity.

2. The convalescent period, continuing as long as spontaneous improvement is marked: *i. e.*, for a period of about two years. During this stage our efforts are devoted to the restoration of muscular power and the prevention of deformity.

3. The chronic period, where the affection has become stationary and deformity, if present, has developed. The object of our treatment from now on is to correct existing deformities and to improve function. So the treatment assumes a surgical aspect and is largely operative.

During the attack and for six to eight weeks thereafter rest in bed is of the utmost importance; so repair may go on undisturbed. This should be insisted upon even if it is not made necessary by the prostration and pain. The limbs should be enveloped with cotton and supported by pillows, sand bags, etc., in such a way as to avoid any undue tension and stretching upon the paralyzed muscles and relaxed ligaments. The weight of the bed clothing being taken off the toes by a bed hoop or other device.

The prevention of deformity at this time is a matter of great importance, for such contractions are liable to occur early in the disease. Of the total number of cases examined by us during the recent epidemic, nine presented a well marked equinus as early as the fourth week. The development of a contraction deformity in the early stage must be regarded as an evidence of neglect or lack of proper care.

If the feet are not properly supported they fall into a position of plantar flexion, followed by an adaptive shortening of the calf

*Read before "The Connecticut State Society," Bridgeport, October, 1916.

muscles, so when the patient is ready to walk there exists a talipes equinus requiring correction before a brace can be applied. To prevent this the feet must be constantly supported at right angles to the leg, which is best accomplished by a plaster of paris cast or an angular wire splint. We have been applying a well padded plaster cast to these cases, cutting it down each side and removing the front, so that the limb rests within a plaster shell. This is more comfortable than the solid cast and permits easy and frequent inspection. A tendency to contraction of the knee joint or a flexion deformity at the hip may be controlled by a long plaster of paris spica.

In several cases where the paralysis was very extensive, accompanied by marked hyperesthesia, we were able to relieve the pain and, at the same time, guard against deformity, by placing the child on a Bradford frame or a wire cuirasse. This provided absolute rest and protection, and made it possible to carry the child about without injury.

At this time the limbs may be passively moved to relieve stiffness, and parts of the body not tender may be gently rubbed; but any active treatment during the acute stage is harmful, so long as any tenderness is present. We have seen several cases where light massage has increased the pain and tenderness to such an extent that rest in a plaster cast was necessary.

During our recent epidemic, we were called in consultation by several physicians, who in their anxiety to help their patients commenced active treatment too early, with the result that the child became so tender he could not bear the slightest touch. A few weeks of absolute rest resulted in the disappearance of the soreness, after which treatment was again taken up without further complications.

In the acute stage, then, the orthopedist should confine himself to the prevention of contractions and insist upon absolute rest until all tenderness has disappeared.

After the soreness has largely disappeared warm baths are of value. The buoyancy of the water removes the weight of the limbs and permits motion which would not be possible otherwise. The addition of sea salt to the bath increases its specific gravity.

With the disappearance of the tenderness we enter upon the convalescent stage, which is of the greatest importance to the patient as far as future function is concerned.

This is the time during which, by proper treatment, we may expect to bring about the greatest improvement. And the entire time must be devoted to those therapeutic measures best calculated to promote the welfare of the affected muscles and bring them to their highest efficiency.

One of the first things to be considered at this time is in regard to the advisability of the patient getting up and about.

Judson and others are in favor of prolonged rest in bed for a period of from six months to a year, after the acute stage has passed; but the practice of allowing a child to lie or sit around for months, with no attempt to walk, is liable to result in the development of serious flexion deformities, and inhibit the normal development of weakened muscles.

Except in unusual cases it seems advisable to permit the child to assume the upright attitude early in the convalescent phase, provided he is carefully watched and the muscles protected from undue strain.

At this time the child may not be able to sit up on account of the muscular weakness of the back and abdomen. In such cases the patient may be propped up in a chair and supported with pillows until he is able to sit alone. All cases must be carefully watched at this time for the development of a scoliosis; a condition frequently overlooked.

When the child is able to sit up without support, a careful examination will determine whether he should be permitted to walk with or without support. If he can walk without a brace he should be permitted to do so, provided every care is taken to guard against fatigue. At first the walking must be limited to a few steps, gradually increasing it from day to day, but never allowing the child to become tired. Here again we prefer to err on the side of being over cautious.

If the patient cannot stand or walk without support, or assumes a position of deformity, the use of a brace is necessary; but it must be remembered that such apparatus is put on only to make walking possible or to prevent deformity, and should not be worn continually except in cases of long standing, where further muscular gain is hopeless.

If a brace is considered necessary it should be removed for a few hours daily for the normal use of the limb, and the child encouraged to make an effort to use the part involved.

In all methods of treatment the mental efforts of the patient play the most important part toward affecting a cure. By wearing a brace constantly the child loses the value of mental effort and physical action, which tends to increase muscular atrophy.

The lightest form of apparatus must always be selected, and particular attention paid to having the bands well padded, since the circulation of the part is poor.

Paralysis of the anterior muscles of the leg results in foot drop. The toes dragging on the floor when the limb is swung forward. The simplest apparatus to prevent this condition consists of two upright steel bars, attached above to a calf band, and below to a sole plate. A stop joint at the ankle prevents the foot dropping beyond a right angle.

A paralysis of the posterior muscles below the knee, resulting in dorsal flexion of the foot, may be treated by the same brace, with a joint arranged to prevent flexion beyond a right angle.

Paralysis of the thigh muscles will require the application of a long brace, extending from the upper part of the thigh to the sole of the foot. In older people a drop catch is used at the knee, allowing flexion when the sitting posture is assumed. If the hip muscles are involved the brace is extended upward to a pelvic band.

Paralysis of the upper extremity is fairly uncommon, and mechanical treatment is rarely demanded. If the deltoid is involved the arm is supported by a sling, to prevent its weight dragging upon the shoulder joint.

The development of a paralytic scoliosis requires the wearing of a jacket or spinal brace.

One thing that must be taken into consideration when the child begins to stand and walk is the fact that, owing to the prolonged recumbency, he may be unable to stand either with or without crutches. So we must remember that this difficulty in standing may be due not entirely to muscular paralysis, but to a loss of equilibrium, which is quickly restored by repeated drills.

Having guarded against the development of deformity, we are ready to consider those therapeutic measures best adapted to restore the maximum power to the weakened muscles.

These are: a—Massage, b—Heat, c—Electricity, d—Muscle training.

These methods of treatment cover the entire field of thera-

peutics during the convalescent stage, and, if properly used, must result in the maximum return of muscular power.

Massage of an affected limb stimulates the flow of venous blood toward the heart and increases the flow of arterial blood to the limb. Direct manipulation of the muscles must also empty them of waste products retained in the muscles themselves. These measures all tend to improved circulation of blood and lymph in the affected parts and thus diminish muscular atrophy. Therefore all that we may expect from massage is that it will improve muscular tone and prevent atrophy.

This means of treatment should be regarded as an adjunct only to the other forms of muscle and nerve stimulation; and must not be used to the neglect of other remedies fully as important.

Massage is best given by persons skilled in its employment; but where the expense is too great rubbing may be substituted. Daily massage by the mother or nurse is preferable to two or three treatments a week by an expert.

It is best applied before bed-time after the parts have been thoroughly warmed. Its use at first must be limited, and 10 to 15 minutes will be sufficiently long if only one extremity is affected, gradually extending the time to 20 or 30 minutes.

In our opinion one of the serious drawbacks of this treatment is that the patient is given too much of it; often resulting in fatigue and loss of muscular power.

Stroking, friction, kneading and percussion comprise the most important movements.

In connection with massage, mechanical vibration is of undoubted value in increasing the blood supply of the part and producing a mild contraction of the muscle fibres.

Immediately following massage the operator should be instructed to move each joint to the limit of the range of motion, in every direction. This keeps the joints in good condition and prevents the contraction of muscles and tendons.

If a partly paralyzed limb is heated it is capable of performing better muscular function and adds greatly to the effectiveness of massage. This is best applied in the form of radiant heat; but where special apparatus is not available, an ordinary oven or open fire may be used.

Lovett uses a large sheet of asbestos in which a hole is cut

and the limb put through into a moderately heated oven, or close to an open fire, the asbestos protecting the patient's body from the heat.

A warm bath just before the time for massage relaxes the muscles and joints and makes subsequent manipulation more effective. Hot water is a less desirable form of heat, as it makes the skin tender and cannot be borne at as high a temperature as can the dry heat.

At the present time the value of electricity in the after treatment of infantile paralysis is being questioned by many authorities.

Lovett has used electricity on a patient's right or left side in cases of symmetrical paralysis, and states that in no instance has the side so treated shown a faster rate of progress. Frauenthal uses the interrupted galvanic current and considers it of more value than all other methods of treatment.

During the past three months we have been using the combined faradic and galvanic sinusoidal, and feel convinced that these cases have been benefited.

If we subject a muscle to the action of a slow sinusoidal, we obtain a contraction which starts slowly and by a gradual effort ends in the most complete contraction of which a muscle is capable. During this contraction all the detritus and venous blood are forced out of the muscle. A gradual relaxation follows, succeeded by a period of rest, during which the muscle absorbs fresh arterial blood. It is then in the best possible condition to exert its maximum force when the current again stimulates it to its next contraction.

It would seem that electricity applied in this way forms a legitimate means of treatment, where contraction of a given muscle cannot be produced voluntarily. It must be remembered, however, that these cases always improve spontaneously, so it is very difficult to attribute the amount of improvement to any one method of treatment.

The electrodes are placed over the origin and insertion of the muscle or muscle group involved, using the smallest amount of current that will produce contraction. The length of time required for such a treatment depends upon the extent of paralysis. Each muscle is made to contract from 10 to 12 times.

Our one objection to the use of electricity lies in the fact that

it is often regarded as a cure-all; with the result that other methods of treatment which are of greater value are neglected.

High frequency and static electricity have been tried for their influence on nutrition, rather than for their action on muscle contraction, but we wish to state our belief that the main dependence for active results in the use of electricity must be placed upon the galvanic and faradic currents.

Probably no other method of treatment is of greater usefulness in restoring power to a paralyzed limb than the so-called muscle training. This subject is a large one and the limited time at our disposal makes it impossible to do more than describe, briefly, the principles involved.

This treatment is always preceded by a careful examination of the function and strength of the muscles involved. Positions favorable to the contraction of special muscles are chosen, and the patient directed to perform a certain movement, while the muscle or its tendon is carefully watched for evidence of contractile power.

After this preliminary examination, a set of exercises is made out to suit the individual case. The part to which the muscle belongs is put through passive motion in the direction desired and the patient directed to move the part in the same direction. If a muscle is apparently without any power, the patient must concentrate his attention on the attempt to accomplish the motion while it is performed passively by the assistant. As the muscle becomes stronger less assistance is given, so the muscle is allowed to take up more of the work.

The keynote of this treatment is to complete the motion for the patient at the point where he is unable to carry it further.

We have found it convenient to have these exercises printed in the form of a pamphlet. After a careful examination to determine the muscles involved, the indicated exercises are checked off, and the parents or nurse taught the correct method of carrying them out.

These exercises are given once daily and the patient should report to the physician at least every two weeks. For with an improvement in muscular power, some resistance should be added to the exercises.

Since our recent epidemic we have had many opportunities to test the value of this treatment; and the results have been so

satisfactory that we do not hesitate to place muscle training at the head of all therapeutic measures during the convalescent stage.

Our directions for the home treatment of these cases are made as simple as possible.

First. Apply heat for 5 or 10 minutes, by one of the methods described. Preferably one of the forms of dry heat.

Second. Massage for 20 minutes in the form of friction and kneading; all motions being made toward the center of the body. This is immediately followed by manipulation; each joint being moved to the limit in every direction.

Third. Muscle training in the form of exercises, prescribed and demonstrated by the physician in charge.

This home treatment is best given at bedtime and will require from an hour to an hour and a half for its application.

Electricity and vibration should only be given by the physician.

If we were asked the comparative value of these four methods of treatment, we would unhesitatingly place muscle training first, followed by massage, heat and electricity in the order named.

In the chronic phase the tendency to spontaneous improvement is slight. It is the stage of permanent paralysis and the time when fixed deformities become apparent.

In a large number of cases the patient is not seen by the orthopedic surgeon until months or even years have elapsed since the attack. They are then brought for the treatment of secondary deformity often of an extreme degree, and here the treatment must be largely surgical.

Operative treatment at this stage is undertaken for two conditions:

1. The correction of deformity.
2. The improvement of function.

It is a fixed rule in orthopedics that no treatment with the idea of improving function should be undertaken until all existing deformities have been corrected.

One of the most common deformities we are called upon to treat is talipes equinus. If the anterior muscles of the leg are paralyzed, the foot drops under the influence of gravity into the

position of equinus. If this is not corrected, the posterior muscles become shortened in structure producing a so-called permanent deformity. This makes walking and standing difficult, and must be corrected before other treatment can be carried out. This is readily accomplished by a tenotomy of the heel cord and the proper application of force.

Flexion deformity at the knee may be overcome by persistent stretching, combined, if necessary, with division of the contracted tissues on the posterior aspect of the joint.

Flexion deformity at the hip requires division of the contracted tissues, preferably by open incision, followed by forceable extension, and the application of a plaster of paris spica.

In cases of paralytic knock-knee we have been using the typical McEwen osteotomy. Dividing the shaft of the femur just above the inner condyle, followed by over-correction and the application of a plaster spica.

All these operative procedures must be followed by the use of a brace to prevent recurrence.

Probably the most difficult deformity to treat in connection with infantile paralysis is lateral curvature of the spine. This condition is frequently overlooked in the early stages of the disease, and when the child is finally brought for treatment a structural scoliosis has developed.

If in the early stages a tendency to spinal curvature is present, a light canvas corset, reinforced with steels, should be applied even before the child is permitted to sit up.

If the case is seen later on when deformity has become fixed, a corrective plaster of paris jacket must be used.

In practically every case of paralytic scoliosis some form of spinal support must be worn during early life, and perhaps indefinitely; as the deformity is due to a weakening of the muscles on one side of the spine, which is liable to be permanent.

After existing deformities have been corrected, we are ready to consider those operative measures which have for their object the improvement of function.

As a rule, these operations should not be undertaken within two years of the acute attack, and are better suited to older than to younger cases.

Where certain groups of muscles are paralyzed and the opponents remain strong, the operation of tendon transplantation

has achieved some brilliant results; and simply consists in substituting a healthy muscle for one which has lost power.

Originally the transplanted tendon was attached to the tendon for which it was substituted. Better results are now obtained by attaching the tendon directly to the periosteum. If the tendon is too short to reach its insertion, it may be elongated by braided silk ligatures, which become surrounded by fibrous tissue, making a perfectly good tendon.

Our best results in tendon transplantation have been obtained in restoring the balance to the foot.

In foot drop the anterior tibial and the large extensors are generally paralyzed; but, as a rule, the extensor proprius hallucis is unaffected. The tendon of this muscle is divided, and attached to the tarsus just in front of the scaphoid. This helps preserve the muscular balance of the foot and often increases the power of dorsal flexion.

In cases of varus, where the peroneals are paralyzed, the anterior tibial is attached to the middle of the dorsum of the foot, at the level of the medio tarsal joint.

Talipes valgus from paralysis of the tibialis anticus is helped by transplantation of one of the peroneals to the inner side of the foot.

In paralysis of the quadriceps we have obtained good results from carrying two of the hamstrings forward and inserting them into the tendon of the quadriceps.

At the hip and shoulder satisfactory tendon transplantations are rare: although recently fair results have been reported in substituting the pectoralis major for the deltoid.

After all transplantations the part must be fixed in the overcorrected position by a plaster bandage for, at least, six weeks, followed by a brace for six months longer.

Tendon transplantation aims at giving better function by substituting a healthy muscle for a paralyzed one. In many cases however there are no muscles to transplant, the entire region being paralyzed.

In these cases the joints, especially at the knee and ankle, are flail-like and unable to support the weight of the body without bending and several operations have been devised with the idea of stiffening the joints, to secure greater stability.

One of the oldest of these is arthrodesis. The joint to be

stiffened is opened and the cartilage entirely removed from the articular surfaces. The incision is closed and the part immobilized by a plaster cast for a period of three months, to secure firm ankylosis. We have performed arthrodesis at the ankle joint in several cases and in two cases at the knee, with satisfactory results as far as weight bearing was concerned.

Experience has shown that the operation should not be done on children under ten years of age, for in young children the ends of the bones are largely cartilaginous, and its complete removal may injure the epiphysis.

At the present time we have practically discarded arthrodesis at the ankle and have used in preference astragalectomy. This consists of removal of the astragalus and slipping the foot backwards, so the weight is borne upon the middle third of the foot instead of its posterior third. The functional result following this operation is generally excellent.

Where the knee joint is flail-like and unable to support the weight of the body, we must either resort to arthrodesis with the idea of securing a permanently stiff joint, or depend upon the constant use of a brace.

Shortening and dislocations are late events occurring during the latter part of the convalescent stage. When shortening exists to any degree it must be corrected by building up the sole and heel of the shoe, until in standing the two extremities are of equal length. Otherwise the constant inclination of the pelvis must result in a secondary scoliosis.

True dislocation from infantile paralysis frequently occurs at the hip joint, the most common displacement being upward and backward on the dorsum of the ileum. The head of the bone is easily replaced, but owing to the relaxed and paralyzed tissues about the hip, it is practically impossible to secure a stable joint without performing an arthrodesis.

We have endeavored to show briefly what the field of orthopedics can offer to these cases of infantile paralysis.

Only those cases which are so extensively paralyzed as to be unable even with apparatus to use a wheel crutch are not amenable to treatment. And frequently with these methods, carefully selected and properly applied, children apparently doomed to spend the rest of their lives upon the floor are restored to health and comparative usefulness.

The Chironian

The monthly Journal of the Alumni Association of the New York Homeopathic Medical College and Flower Hospital.

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EDITORIAL

THE following extract is taken from an article appearing in the *Outlook* of November 15, 1916:

"Every vocation has its disagreeable incidents. its disadvantages, its burdens, its call for self-sacrifice. It would not be difficult to match our correspondent's article by one concerning the merchant, the mechanic, the farmer, the teacher, the lawyer, the doctor. For example:

Why I Do Not Want My Boy to Be a Doctor?

The doctor has no home life. He is at the beck and call of everybody at every hour of the day and night. He deals with men and women when they are in abnormal conditions, often when they are unreasonable or racked with fears and anxieties with which he cannot but sympathize. They sometimes call him too late, and he knows that if they had acted more promptly a long sickness, perhaps death, might have been avoided. Sometimes they call him when there is nothing the matter, and he must either offend them by telling them so or appease their mental trouble by

a harmless medicine. When his bill is rendered, it is a chance if they have not almost forgotten that they were sick and think his charge excessive. If they do not, his bill is very apt to be laid aside—the last to be paid. The wise doctor recognizes the fact that disease is a mystery, and that he cannot always tell what the symptoms reported to him or discoverable by him indicate. The quack always thinks he knows, and the wise doctor often finds his patient taken away from him by a dogmatic but ignorant adviser. No man goes through a long life without making a mistake. The conscientious doctor carries continually the responsibility for human lives. A mistake, if he makes one, seems to the family unforgivable, and even if they forgive him it is difficult for him to forgive himself. The lawyer wins some causes, the politician some elections, the minister saves some lives from self-destruction, but the doctor is all his life long fighting a losing battle, for he is fighting death, and death is sure to win at last."

Living in a day of almost abject materialism it is not surprising that some people are alive to lower motives and dead to higher ones. It would be surprising indeed if even among physicians this spirit were not sometimes present and yet, where will one find more lack of selfish interest. The man who enters the medical career with even a measure of ideals posssesses a trait that makes his ultimate object not money, or pleasure, or reputation, or praise, or appreciation; he will render service and do his duty whether anyone thanks him or not, or whether anyone knows about it or not. He will do it at whatever cost.

The real rewards in life lie altogether above the market line. They cannot be bought and sold. They are not transferable. The man who does the task at hand in the spirit of disinterested service cannot be separated from the reward that inherently goes with it. No man can be deemed a real servant who lacks selfish interest.

Two of the things most often associated with service of any kind are money and glory in various forms. That money is necessary and should be sought for nobody questions. That great wealth can be turned to great uses is equally evident. The world's magnates ofttimes are devoted servants of an ideal that calls out their best. At the same time as one reflects upon a life's voca-

tion, money should not be overestimated. It is amazing what has been accomplished without money or much of it. Most of the great achievements in art, literature, science, discovery, political freedom, moral reform have been the work of poor men. The world is indebted not to Crœsus but to Socrates.

In fact, men can buy a vast deal less than they think they can. They may look at the stars and envy their beauty, but they cannot buy them, and the man with a real finesse of spirit often gets more from an acre of green grass and trees than the man that owns it. Truth is not for sale. It is remarkable that the best things, the really desirable things, are never mentioned in the same breath with money. They cannot be gotten for gold. They belong in other realms of values. Who would dare estimate in the measure of money the incalculable worth of the life's labor of so great a character as that of Samuel Hahnemann.

The physician who is true to the spirit of Samuel Hahnemann feels a deeper interest in his work than the mere money return connected with it could possibly arouse. He would do the same work and practice the same principles provided he were given the means to live and to do it with—if all fees and unnecessary comforts were swept away. There are rich and poor men working side by side in the great cause of homeopathy and in the same spirit of Hahnemann say, "I haven't time to make money."

What if Samuel Hahnemann had said, "Why should I do anything for humanity? It hasn't done anything for me."

Misunderstood and failing to find proportionate vindication on the part of his fellowmen to some he seemed a failure. He lost himself in his work and duty to the world and yet out of the apparent failure there came a lasting success that found itself an immortality. Such self-sacrifice and self-effacement can afford to seem to die. It will have its resurrection.

What if Samuel Hahnemann did seem to be fighting an apparent losing battle? His side was that of truth and he knew that in the end the principle for which he sacrificed would be triumphant.

Minds that are soaked with money values and have no ideals outside a commercial realm utterly fail to comprehend the measure or even discover the existence of disinterested service of a Samuel Hahnemann and his disciples.

Again, appreciation, recognition, praise, notoriety, fame—all this is pleasant, none of it necessary. The greater minds think little about it. Simeon Stylites, in one of Tennyson's poems, could not get along without the universal praise of men.

The love of such recognition is a multifarious and omniverous beast. It captures some persons in part, others, like Napoleon, it devours body and soul.

To strive after glory is to strive after a shadow and let the real thing go. Waterloo was a clash between duty and glory, and duty won as in the end it always must. Samuel Hahnemann fought a valiant battle against the errors and abuses in the medical profession of his day and in so doing may be cited to the world as a noble embodiment of heroic conduct. Talked against and persecuted for what he dared to think and dared to do in obedience to his consicence, nevertheless he held bravely on his way. In so doing he exhibited something which required a greater courage and a finer heroism of soul than is needed when moving along shallow lines of least resistence. He showed the willingness to be lost sight of, to work on in a quiet and unobtrusive way without immediate recognition or the expectation of it from the world at large. He answered the challenging truth of homeopathy by being willing to sacrifice in so great and good a cause, even though not certain that the sacrifice would ever be known.

Samuel Hahnemann, the founder of homeopathy, is an ideal to hold before the father who wishes to aid his son in a decision for a life's work. He is an example for the physician growing discouraged to hold up as a refreshing ideal by which he may tone up that which has become stale and commonplace.

In thinking of Samuel Hahnemann we are reminded of one of the noblest instances of self-unselfishness the world has ever seen. Be it said to his immortal honor that he was willing to sacrifice himself to the utmost for the sake of the eternal truth of homeopathy.

To the man who hesitates at the sacrifice he may make to be a physician—and many make sacrifices—let it be said without insincerity that it is a great thing to follow truth for the sake of truth. If the path of truth leads to homeopathy follow its vision faithfully, through all the days that are to come and there

will be a conscious satisfaction within that will exceed all that excessive praise and money can bring.

"Glory of warrior, glory of orator, glory of song,
Paid with a breath flying by to be lost on an endless sea;
Glory of virtue, to fight, to struggle, to right the wrong,
Nay, but she aimed not at glory, no lover of glory she;
Give her the glory of going on and still to be."

CHRISTMAS finds the world in the most distressful condition of all its history. For the war in Europe, which shadows every threshold, is a war of Christian against Christian, with no distinction of sect. The Protestant German emperor and his ally, the Catholic emperor of Austro-Hungary, clash swords with Britain's Protestant king, the king of the Catholic Belgiums, the Greek Catholic czar of Russia and the Catholic peoples of France and Italy. There are six hundred million Christians in the world, and two-thirds of them are at one another's throats.

But it is not Christianity that is fighting, nor is the greatest of religions on trial. Nationalism has overshadowed all differences of sect, all thought of religion except in its individual relation. Ireland rallies to the banners of the kingdom that once tried to grind her religion in the dust. Protestant England strikes at Protestant Prussia even as the Italian soldier strikes at his Austrian co-religionist. Even the clergy leaves its altars for its flags. The dominie dies in the trenches and the priest finds a martyrdom for country if not for Christ.

And all this is not because of Christianity, but in spite of it. The sins of nations are not the sins of the individual. Christianity cannot fix boundaries, or barter seaports, or regulate trade Perhaps Christianity ought to spell internationalism, but it does not. It has checked man's private passions, but it has not quenched the fires of nation's greed and hatred.

Yet those who feel that Christianity has been proven a failure are mistaken. There has been, from the very war itself, a spiritual uplifting that must be a part of religion. That men should have formed different ideals of national life is no fault of the faith in which they were nurtured. The world taught itself that

"Thou salt not kill" is not a commandment for the state, and Christianity has not been materially powerful enough to decree that the sword shall not be the final arbiter of nations.

But the nations that are watching the war most closely—the influences that must end the war—are Christian, too. Who shall say that their impulse to stop the horrows of war does not spring from the ideals for which the Cross stands?

A merry Christmas? No, it would be mockery to suggest it. There can be no merry Christmas even for this fat, rich, peaceful America of ours until there is peace in Europe. The world is too small for that.

But there can be a hopeful Christmas. Even now the star of hope seems to glimmer in the East beside the star of Bethlehem.

If the physician clearly perceives what it is in disease in general and in each case of disease in particular that has to be cured (knowledge of disease, knowledge of the requirements of disease or disease-indications): if he clearly perceives what is the healing principle in medicine generally and in each medicine in particular (knowledge of the powers of medicines): if in the light of clear principles he can so adapt the healing virtue of the drug to the illness that is to be cured that recovery must follow, and if he has the ability not only to select the particular remedy whose mode of action is most suitable for the case (choice of the remedy or indicated medicine), but also to choose the exact quantity of the remedy required (the suitable dose), and the fitting period for its repetition, if, I say, he knows all these things and in addition recognizes in every case the hindrances to lasting recovery and can remove them, *then truly he understands how to build up his work on an adequate basis of reason, and he is a rational practitioner of the healing art.*—*Organon of the Rational Art of Healing.*

Pertinent Facts Regarding Matters of Importance to the Homoeopathic Profession.

IN accordance with the revised Constitution and By-Laws of the American Institute of Homeopathy and the new plan of reorganization and operation adopted by the American Institute at Baltimore, the Executive Committee, consisting of J. P. Cobb, F. M. Dearborn and C. E. Sawyer, to whom the matter of installation of the new plan was assigned, have secured a suite of eight rooms in the Marshall Field Building, Chicago, in which have been opened the administrative offices of the American Institute of Homeopathy.

The section of Publication, directed by Sarah M. Hobson; the accounting and recording section by the newly employed Secretary-Treasurer, T. E. Costain. The Supervision Section under the direction of the Executive Committee, all find commodious quarters in which to pursue their work.

With the corps of capable assistants for each division in offices with equipment with which to work efficiently and promptly, the business affairs of the American Institute of Homeopathy are now really ready to proceed.

With a definite systemized plan for the conduct and consideration of all matters pertaining to all Homeopathic interests; with the centralizing of all forces; with a definite fixed purpose, with paid assistants to carry on the work, all that is now required to promote Homeopathy is the hearty co-operation of the profession.

Homeopathy has been at a great disadvantage because it has had no central office in which to operate, no place from which to direct, no specific management, no fixed plan of operation. All of this is now changed and the work of the American Institute of Homeopathy will be pushed with energy and enthusiasm.

Among the matters to which especial and immediate attention will be given by the administrative department is a complete and reliable list of all homeopathic practitioners throughout the United States. We wish to know just who the active homeopaths of the country are and where they are located. We believe

that it is better to have a few thousand of real workers who are ready and willing to assist than thousands of nominal members indifferent to homeopathic interests. So it shall be our aim to enlist in the reorganization only those that are ready and in earnest in promoting things homeopathic.

No body of professional men ever had more which is worthy of presentment than the homeopathic profession, none with better prospect of accomplishment. As proof of these assertions let us take an inventory of what we have found, then we will be the better able to conclude whether the required effort is justifiable.

From the recent report of the Council on Medical Education, we find there are 101 accredited homeopathic hospitals, representing 20,092 beds, in the United States. During the past fiscal year there were treated in these hospitals 109,527 hospital patints, with an average mortality rate of 4.1 per cent. It requires annually 248 internes to properly house-staff these hospitals. The property value of these strictly homeopathic institutions is $36,819,452. In the out-door or Dispensary departments of these institutions there were treated during the last fiscal year 287,887 patients. In the training schools for nurses connected with the purely homeopathic institutions there were enrolled last year 1,849 pupils. In addition to this we have:—10 National Medical Societies, 31 State Medical Societies, 75 Local Medical Societies, 34 Medical Clubs, 6 Homeopathic alumni associations, 29 homeopathic dispensaries, 10 homeopathic colleges, 18 homeopathic journals.

And with ten thousand active practitioners throughout the country, serving an intellectual people, 35 per cent. of which employ homeopaths, it is only reasonable to assume that a business organization is necessary and only reasonable to presume that a well organized and conducted business administration will elevate medical standards, increase patronage, develop interest and force recognition.

That is all possible by a combined effort which will be brought about by federation and affiliation of all medical societies, colleges, hospitals, training schools, clubs, fraternities and individuals. In union there is strength and it is the determination of those in charge to bring about a hearty co-operation of the profession. This is only one of many things all ready on the

way to establish Homeopathy in the front rank of medical fraternities.

All can assist in this undertaking and each will become one of the direct beneficiaries. Are you ready and willing to help? If you are and if you have not already done so, please sign and mail the attached coupon, which will not only aid us in getting a corrected list of homeopathic doctors, but it will encourage us in our efforts to put Homeopathy in the high place to which all Homeopaths aspire.

THE AMERICAN INSTITUTE OF HOMEOPATHY.

Supervision Division.
No. 829 Marshall Field Building, Chicago, Ill.

I do / I do not — Wish to be enrolled as a Homeopath.

I do / I do not — Wish to receive literature pertaining to Homeopathic matters.

I am / I am not — Willing to aid in Reorganization, Federation, Co-operation and affiliation, as recommended by the American Institute of Homeopathy.

(Indicate your position by marking with a star.)

My address is:—

Name .....

City .....

State .....

The U. S. Department of Agriculture sends out information concerning the best way of Pasteurizing milk. This is very well, but there are several men who would like the Department to test the nutritive qualities of this sort of milk as compared to "raw" milk. London *Lancet* prints communications from reputable physicians stating that young animals fed exclusively on Pasteurized or sterilized milk pine and die, while others fed on the natural milk will grow up healthy: a point worthy of attention by the Department.—*Hom. Recorder*.

Wounds and Rupture of the Spleen*

BY

H. C. Lyman, Class of 1917.

AS compared with lesions of other parts of the body, due to injury, lesions of the spleen are very rare, and comparatively few cases have been reported.

Wounds of the spleen are generally caused by gunshots or stabs. Splinters of wood may also pierce the abdominal wall and injure the spleen. In these cases the spleen alone may be affected, but generally other viscera as well are involved. From whatever cause, an external wound will be seen. The individual will collapse and in a short time may pass into the state of unconsciousness. There may or may not be vomiting of blood. The abdomen will usually be found to be somewhat distended on the left side, and the abdominal muscles will be rigid, especially the left rectus. Upon percussion, the splenic area will be enlarged, the dulness may extend to the left flank. In a number of cases it may be found that the dulness, which is due to hemorrhage, may extend over the entire abdomen. This is diagnostic of internal hemorrhage only, and calls for immediate surgical interference.

Generally the spleen is involved to such an extent that excision of the organ is the best treatment.

More common and less serious than wounds of spleen is rupture of spleen. This is due to blunt objects striking the body in the left hypochondriac region below the ribs or above the ribs, with fracture of the same. Vehicles passing over the body in the splenic area may cause rupture, or blows to the right side of the body may rupture the organ by contracoup. Rarer by far is that form of rupture occurring in falls in which the individual strikes on his feet. Individuals suffering from malaria, typhoid

*Department of Surgery, New York Homeopathic Medical College and Flower Hospital, Symposium on Surgery of the Spleen, under direction of Joseph H. Fobes, M. D., F. A. C. S., Assistant Professor.

and pernicious anemia are predisposed, due to the splenic enlargement, and in these cases rupture frequently occurs. In these cases the rupture may appear spontaneous, but slight violence has probably been overlooked.

The lesions vary greatly. The capsule may remain intact, and small hemorrhages will infiltrate the parenchyma with subsequent enlargement of the organ, or the spleen may be divided into two or more parts, and thus involve the vessels at the hilum. The lacerations take on various shapes, small or large, regular and clean cut, irregular and jagged, or stellate. The hemorrhage varies with the extent of the lesion. If large in amount the symptoms are produced immediately, while if small the hemorrhage will be small and may remain pocketed. In such instances the symptoms will not be marked in twenty-four to seventy-two hours.

In well marked cases with the history of trauma there will be the anxious face, pallor, and a feeble, rapid pulse. The individual will complain of pain in the left hypochondriac region. This pain is constant and increases in intensity. The patient suffers from shock and, as the pain increases, shock becomes more intense. The abdomen is usually enlarged on the left side and high up. There may or may not be vomiting of blood. Thoracic breathing is marked. There is considerable tenderness over the splenic area, the abdomen is usually rigid, especially over the left rectus muscle. The spleen becomes enlarged and the area of dulness, due to the hemorrhage, may extend to the left flank. With the stethoscope on the abdominal wall, and by gently depressing the wall, friction sounds which are very weak may be heard. The sounds are produced by the clots of blood coming in contact with the abdominal wall.

With the shock and the pain Eliot lays great stress on the amount of costal resistance and force encountered in depressing various segments of the costal arch toward the vertebral column. The temperature in these cases rarely exceeds 102°, while the pulse varies from 100 to 150, and the respirations from 30 to 40.

The mortality, according to Berger, is 92.3 per cent. in unoperated cases, while by every operative procedure the mortality is below 40 per cent.

Of the methods of treatment, namely, suturing, tamponade

and splenectomy, each has its adherents. Suturing is unreliable in the stopping of hemorrhage because of the ease with which the splenic tissue tears. Tamponade has been used with great success. Ross has reported six cases collected by him in which there was one death. It is best used in those cases in which the wound is slight, where quick work is necessary to save the patient, and where, due to adhesions of the organ, splenectomy is contra-indicated.

With splenectomy the death rate is rather high (34 per cent.), but the stopping of hemorrhage is sure, and patients recovering seem to suffer no bad effects from the loss of the organ.

An incision is best made over the point of greatest tenderness, the pedicle, with its vessels, is ligated and cut and the organ removed. All clots are removed from the abdomen, and it is thoroughly irrigated with hot saline. The wound is closed except at its lowest portion, layer by layer, and drainage is instituted.

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3 West 108th Street, April 10th, 1916.

The physician has no higher aim than to make sick folk well, to pursue what is called the Art of Healing—*Organon of the Rational Art of Healing.*

Lycopus has many heart-symptoms, chief among which is the tendency to shift from rectum to heart and head; from heart to eyes; from head to heart; from heart to left wrist and right calf, and back to wrist and heart. The charatceristic heart is a feeble heart, with distress and week pulse.

The Spleen and Its Relation to Blood Diseases*

BY

F. Fay Williams, Jr., Class of 1917.

I WILL take up, first, leukemia, of which two forms are distinguished; though the distinction is chiefly a clinical one.

(a) Myelogenous leukemia. (b) Lymphoid leukemia.

Taking first myelogenous leukemia:—This form of blood disease is particularly interesting because of the wonderful variety of the blood-film. The disease consists primarily of an enlargement of the spleen and other blood making organs with an excess of white corpuscles; the count often running as 250,000 per cubic milimeter.

The differential count shows extraordinary types, including many not seen in ordinary blood; there may be myeloblasts, which appear to be a reversion to the ancestral type of myelocytes; eosinophilic myelocytes are also found and are considered diagnostic of myelogenous leukemia.. Mast cells are more numerous than in any other disease, running as high as 12 per cent. and the normoblasts are usually very numerous.

Because of the fact that all the other blood making organs are involved splenectomy has little effect on the disease. The best form of treatment seems to be the X-ray.

Taking next Lymphoid Leukemia.—This form of leukemia is very rare. There are numerous theories advanced as to its cause, but the most plausible one seems to be that it is a disease primarily of the lymph glands with a secondary metastasis to other organs.

There is a rapid production of white blood corpuscles of the ancestral type with the lymphoid variety predominating over the myelocytes. The leucocytosis may run as high as 40,000 to

*Department of Surgery, New York Homeopathic Medical College and Flower Hospital, Symposium on Surgery of the Spleen, under direction of Joseph H. Fobes, M. D., F. A. C. S., Assistant Professor.

80,000 or as low as 471 per cubic millimeter; with this you will find a lymphocytic percentage running from 90 to 99.9. The red cells are often reduced to as low as 2,000,000 with the hæmoglobin percentage practically corresponding to the corpuscle percentage and the color index remaining normal. The splenic pulp becomes converted into a mass resembling bone marrow.

The treatment is not very satisfactory, but consists of fresh air, diet and abstaining from mental worry; the X-ray has been used but with very little success. Excision of the leukemic spleen has been performed, but with small percentage of success.

Banti's disease or splenomegaly with hepatic cirrhosis is a peculiar disease, which, though it resembles primitive splenomegaly, splenic anæmia and Gaucher's disease gives a somewhat different picture. That the spleen is itself at fault appears probable from the prompt relief which follows its removal.

The disease is manifested in three pathological stages:

1. Simple enlarged spleen without anæmia or perhaps only a low color index.

2. Severe secondary anæmia with pigmentation of the skin and a tendency towards hæmatemesis.

3. Finally cirrhosis of the liver, jaundice and ascites.

Banti believed the disease was due to an unknown infective agent setting up changes of a non-inflammatory character; this agent being carried by the blood to the spleen and causing a degeneration of the splenic pulp and follicles with hyperplasia of the reticulum. A second theory is that the primary disease lies in the spleen and the toxins are liberated into the blood. Another theory is based on the fact that normally the endothelial cells of the spleen ingest old red blood cells and that through loss of vasomotor control of the splenic artery—due to disease of the visceral sympathetic ganglion—causing overfilling of the spleen, this results in hyperplasia and increased functional activity, in consequence of which the endothelial cells destroy both diseased and healthy red blood corpuscles. To substantiate this theory the fact is known that as soon as splenectomy is performed the hæmolysis is stopped and a rapid regeneration of erthrocytes and hæmoglobin is the result.

Age, sex, race nor country does not seem to have any bearing on the disease.

Pathologically the spleen is enlarged, but retains its normal shape and appearance. Usually there are found numerous perisplenic adhesions, and the capsule and fibrous trabeculæ are considerably hypertrophied. The splenic vein shows sclerosing endophlebitis and often calcification and stenosis.

Symptoms of the first stage are of insidious onset and of long duration with progressive painless enlargements of the spleen and subjective symptoms of weight and discomfort in the left hypochondrium. In the second stage the early symptoms are simply those of anæmia, *i. e.*, pallor, weakness, dyspnea and palpitation. The blood is of the chlorotic type with a diminution in red blood cells under 4,000,000, hæmoglobin as low as 40 per cent. and color index very low; also get a leukopenia with a relative lymphocytosis. The urine is diminished and contains urobilin and albumen. The liver is large, smooth and painless. Hemorrhages from the stomach, nose and gums are now apt to appear.

The onset of the third stage is characterized by the development of ascites, the fluid of which has the appearance of a transudate. The liver is now diminished in size and you get an aggravation of the gastro-intestinal symptoms, also the skin becomes very much pigmented.

Diagnosis in the early stages is impossible and because of the comparative simplicity of splenectomy many of the diseases that might be confused with Banti's disease are treated in this way, but the operation must be done in the early stages.

HÆMOLYTIC SOLENOMEGALY.

This is one of the rarer forms of disease and resembles both Banti's disease and hæmolytic jaundice.

It starts with a steadily enlarging spleen, which, however, strange to say, gives no subjective symptoms and often passes unnoticed. The patient seeks medical advice usually because of the anæmia; this varies in its intensity, the red cells may be as high as 4,000,000 or fall as low as 1,000,000; the color index below one; the hæmoglobin under 20 per cent. and the cells show anisocytosis, poikilocytosis and polychromatophilia; also their total hæmolysis may be as low as 0.35—showing greatly diminished resistence. The white count will vary from 4,500 to

12,000, but the differential count varies little. Next we get a slowly developing jaundice, the urine always contains urobilin and the feces are usually highly colored.

Medical treatment is absolutely useless; the only satisfactory procedure is early splenectomy.

In getting these few facts together I have quoted freely from Burnham's Hæmocytes and Hæmic Infections; Biedl's Internal Secretory Organs; Cabot's Physical Diagnosis; Todd's Clinical Diagnosis; Osler's Practice of Medicine; from The Abstract of Surgery, Gynecology and Obstetrics and from The Annals of Surgery.

OBITUARIES.

Thos. C. Elmendorf, Class of 1875, died at his home in Portchester, N. Y., July 18, 1916.

C. E. Putnam, Class of 1886, died at his home in Jersey City, N. J., July 13, 1916.

Frederick H. Sage, Class of 1884, died June 7, 1916, at his home in Middletown, Conn., from pneumonia, aged 55 years.

Solomon Baruch, Class of 1876, died at his home in New York City, September 5, 1916.

Stacy E. Boyle, Class of 1908, died suddenly, en route to South America, in late August, 1916.

Solomon Baruch, Class of 1876, for more than thirty years a practicing physician in New York City, died at his home, 1211 Madison avenue, in his sixty-first year. He was born in New York City. Dr. Baruch was a retired officer of the Twelfth Regiment, New York National Guard, in which he held the rank of Captain in 1878. He was a member of the alumni association of his college. Dr. Baruch left four daughters and four grandchildren.